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Kotkovets A., Piskun O.

## **Pyramid Schemes**

Belarusian National Technical University  
Minsk, Belarus

The pyramid scheme (next Ponzi scheme) is an investment fraud where new investors indirectly pay existing investors. The organizers of the Ponzi scheme often promise to invest your money to get high profits with no risk. But in many schemes, scammers do not invest. Instead, they use it to pay those who have previously invested and keep some money for themselves.

Ponzi schemes with little or no legal income require a steady stream of income in order to survive. When it becomes difficult to attract new investors or when a large number of existing investors cash out money, these schemes tend to collapse.

Ponzi schemes are named after Charles Ponzi, who tricked investors in the 1920s with a postage stamp speculation scheme [1].

### *How does Pyramid Schemes Work?*

Assume that the single person at the top — the initial recruiter represented by the number 1 — starts a recruitment scheme. He recruits 6 people at his next level, each of whom is required to “invest” a certain amount of money to become a part of and benefit from the scheme. This money goes to the initial recruiter.

Apart from investing the money, these 6 members at the second level are required to recruit more members who form the next level. For each new member they recruit, a certain amount of payment is promised which comes from the share of the money taken from every additional member they recruit.

Eventually, a big multi-level structure comes into existence with each level having exponentially higher number of members. However, since profitable opportunities don't really exist and the number of recruits draws to a close, the process continues only until the base of the pyramid is no longer strong enough to support the upper structure, and there are no more recruits [2].

The first financial pyramid in Europe is considered to be the system created by the Scottish economist John Law in 1716-1720 in France. Law since childhood was distinguished by a desire to live not like everyone else, which required a lot of money. At first, he tried to play cards, but it never came to him. Then John came up with the idea of creating money in financial institutions, and not in gold or silver mines, and he proposed changing metal coins to paper money. Law moved to France. There, the regent of the king, the Duke of Orleans, supported his idea of establishing a bank that issued banknotes that were secured by the treasury and land.

But the genius financier did not stop there. In 1717, the Mississippi Company, or the Western Company, began operations. Due to his fame and ability to manipulate the opinion of the crowd, Law was able to raise an unprecedented demand for shares of a company that was engaged in unknown business. The excitement was both among merchants and among ordinary people. But when it became clear that the Western Company does not conduct any significant activities and does not bring real profit, the owners of shares began to get rid of them on a massive scale. The Lo system collapsed, and its author fled to Italy [3].

In the United States, financial pyramids appeared only 200 years later. In 1919, the first of them was created by the Italian emigrant Charles Ponzi. Like John Law, Ponzi always wanted to become rich and successful, and in the end, he came up with a scheme for earning money by attracting money from other people. One day, Charles wrote a letter to a Spanish company with a

proposal to issue an international magazine. The answer came very quickly, and international coupons were put into the envelope, which could be exchanged for stamps for return letters. The most important detail was the coupon exchange rate: in Spain, one mark was given for one coupon, but in the USA — six. This prompted Ponzi to the idea of creating a pyramid company.

In paid articles in the press, an Italian entrepreneur suggested that people buy shares in his company, allegedly engaged in the sale of goods around the world, and receive unheard of profits — 150% of the amount invested in 45 days. Very quickly, both officials and ordinary citizens “bought” promises. Thus, payments to the company's depositors were made at the expense of the money of new participants.

But, like all the pyramids, the Ponzi Scheme collapsed very quickly. A friend of Charles, from whom he borrowed money at the beginning of his activity, sued Ponzi. As a result, all of his accounts were frozen, investors were missing \$2 million, and the author of a simple and profitable scheme was sent to prison for 5 years [4].

MMM is the largest financial pyramid in the CIS countries. Organized by Sergey Mavrodi together with his wife and brother in 1989, the company promised a record yield of up to 1000% per annum. The motto of the company was the slogan “Tomorrow more expensive than today.”

Given the difficult economic time and low financial literacy of people, MMM attracted, according to various estimates, from 10 to 15 million people. The pyramid itself lasted more than 5 years. Its author earned about \$2 billion over this period. When MMM was declared bankrupt in 1997, millions of depositors lost all their money. After the arrest of Mavrodi, several trucks, completely clogged with money, were taken out of his office. Only one recount took about a month.

In 2003, he was convicted in Russia for large-scale fraud. And sentenced to 4.5 years in prison for fraud. However, this did not prevent Mavrodi from attracting people to the pyramid again in 2011 and 2012. And in 2016, a new project by Sergey Mavrodi called “MMM Global” offered to make deposits in Bitcoin cryptocurrency at high interest rates. But, fortunately, they did not become as popular as MMM in the 90s [4].

The characteristic features of the financial pyramid are: lack of a license for the type of activity; inability to verify company information; lack of a clear understanding of the source of profit; profitability is much higher than the average market.

If you have any doubts about at least one of the above-mentioned points, this is a serious reason to think and refuse to cooperate with the organization. Remember that making money is harder than losing it.

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